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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,891	03/12/2004	Russell Smith	8618-USA	4903
31743 7590 01/25/2008 PATENT GROUP GA030-43 GEORGIA-PACIFIC LLC 133 PEACHTREE STREET, N.E. ATLANTA, GA 30303-1847			EXAMINER DAVIS, JENNA L	
			ART UNIT 1794	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/798,891	Applicant(s) SMITH ET AL.	
	Examiner Jenna Davis	Art Unit 1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Applicant claims:

1. A fiber mat faced gypsum board made by (1) contacting a gypsum slurry for forming a set gypsum core with (2) a non-coated side of a pre-coated fiber mat, wherein the fiber mat has a thickness of between 0.02 and 0.045 inch and has a coating on a side opposite the non-coated side, said coating weighing about 30 to 100 pounds per 1000 square feet of mat and comprising a combination of (i) a mineral pigment, (ii) an organic binder and optionally (iii) an inorganic binder, the coating extending from a surface of said side opposite into said fiber mat a distance between about 30 and 50 percent of said thickness and having a microporosity, as measured by a modified Gurley method, of between 2 and 45 seconds, which allows air to flow through as gypsum penetrates the mat and water to evaporate through said pre-coated mat from the gypsum core during preparation of the board, (3) wherein the contacting causes said gypsum slurry to penetrate into the non-coated side and through interstices of the fiber mat to fill said interstices with gypsum and form a bond between said gypsum and said coating, and (4) allowing the gypsum slurry to harden to form said set gypsum core, wherein the set gypsum core in a region near the bond has at least 17 percent combined water.

2. (Original) The board of claim 1 wherein the organic binder is a hydrophobic, UV resistant polymer latex.

3. (Original) The board of claim 2 wherein said mat contains glass fibers nominally about 10 to 16 microns in diameter.

4. (Original) The board of claim 3 in which said mat, in the absence of said coating, has a basis weight of 1 to 3 pounds per 100 square feet.

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5. (Original) The board of claim 1 having a gypsum core density of 40 to 55 pounds per cubic foot.

7. (Currently amended) The board of claim 1 c-taim-6 wherein, on a dry weight basis, I I the mineral pigment comprises from about 75 to 99 weight percent of the coating, the inorganic binder comprises from about 0 to 20 weight percent of the coating and the organic binder comprises from about 1 to 17 weight percent of the coating and the microporosity of the coating as measured by the modified Gurley method is between 5 and 20 seconds.

9. (Currently amended) The board of claim 8 claim 7 wherein, on a dry weight basis, the mineral pigment comprises from about 83 to 95 weight percent of the coating, the inorganic binder comprises from about 0 to 10 weight percent of the coating and the organic binder is a hydrophobic, UV resistant polymer latex binder and comprises from about 1 to 12 weight percent of the coating.

10. (Original) The board of claim 9 wherein said coating was applied to a surface of the fiber mat as an aqueous coating composition and dried to form said pre-coated mat.

11. (Original) The board of claim 10 wherein said aqueous coating composition includes about 0.1 to about 5 wt. % of one or more additives selected from the group consisting of a thickener, dispersant, colorant, defoaming agent and preservative.

13. (Previously presented) The board of claim 10 wherein the set gypsum core contains a water-resistant additive in an amount of at least about 0.2 wt. %.

15. (Currently amended) The board of claim 13 wherein said water resistant additive is selected from the group consisting of a wax emulsion, a wax-asphalt emulsion, poly(vinyl alcohol), a polysiloxane, a silicate and mixtures thereof.

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16. (Currently amended) The board of claim 8 claim 7 wherein the organic binder is a hydrophobic, UV resistant polymer latex adhesive binder and consists essentially of a (meth)acrylic or (meth)acrylate polymer or a (meth)acrylic or (meth)acrylate copolymer.

17. (Previously presented) The board of claim 16 wherein said pre-coated fiber mat consists essentially of glass fibers and wherein the set gypsum core of the fiber mat faced gypsum board is faced on an opposite side with another fibrous mat which consists essentially of a blend of glass fibers and synthetic fibers.

Claim Rejections 35 USC 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Claims 1-5, 7, 9-11, 13, and 15 are rejected under 35 USC 103(a) as being obvious over Randall (US 2002/0455282) in view of Ali (US 4647486) substantially as set forth in the May 2, 2006, Office action.

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Claims 16 is rejected under 35 USC 103(a) as being obvious over Randall (US 2002/0455282) in view of Ali (US 4647486) and further in view of Babcock (US 4746365) substantially as set forth in the May 2, 2006, Office action.

Claim 17 is rejected under 35 USC 103(a) as being obvious over Randall (US 2002/0455282) in view of Ali (US 4647486) and further in view of Babcock (US 4746365) and Miyakoshi (US 5827788) substantially as set forth in the May 2, 2006, Office action.

Claims 1-5 and 7-20 are provisionally rejected on the ground of nonstatutory double patenting over claims 1, 3-16, and 18-23 of copending application 10/417,344 in view of Ali as set forth in the 5/2/2006 Office action.

Claims 1-5 and 7-20 are rejected on the ground of nonstatutory obviousness type double patenting over claims 1-20 of US 6808793 in view of Ali as set forth in the 5/2/2006 Office action.

Response to Arguments

Applicant's arguments presented October 31, 2007, have been considered but are not deemed to be persuasive.

The arguments that the Office has failed to present evidence that the claimed invention is distinguished from the prior art because the cited prior art is silent to the properties set forth in the present claims are not persuasive as no evidence has been to show that the claimed invention is unobvious from the prior art.

As set forth in the 12/13/2006 Office action at pages 4-5 a reasonable basis for this position has been provided. The arguments regarding Mr. Randall's declaration and the silence of his previous work as to the properties disclosed are not found persuasive as the lack of measuring

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properties and the subsequent measuring of such properties does not rise to the level of patentability.

/Jenna Davis/

Primary Examiner, Art Unit 1794